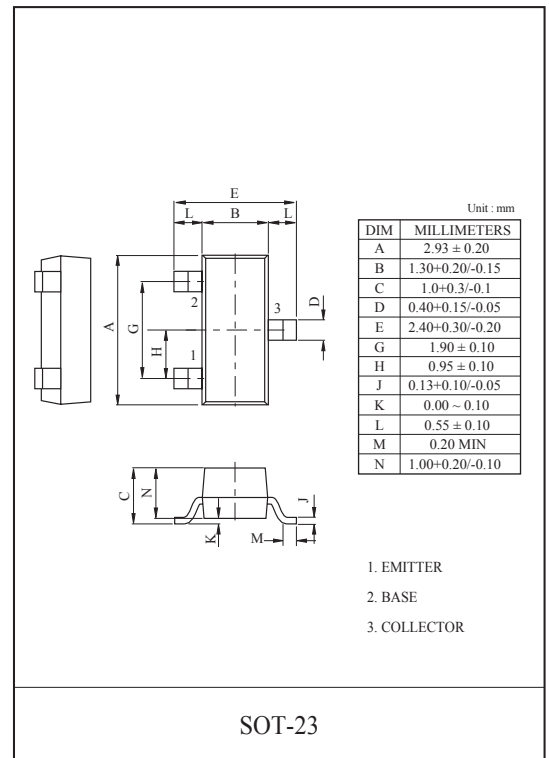


GENERAL PURPOSE APPLICATION.
DARLINGTON TRANSISTOR.

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	MMBTA63/64	V_{CBO}	-30	V
Collector-Emitter Voltage	MMBTA63/64	V_{CES}	-30	V
Emitter-Base Voltage		V_{EBO}	-10	V
Collector Current	DC	I_C	-500	mA
	Pulse	I_{CP}	-1	A
Collector Power Dissipation		P_C^*	350	mW
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55 ~ 150	°C

* : Package Mounted On 99.5% Alumina 10 × 8 × 0.6mm.



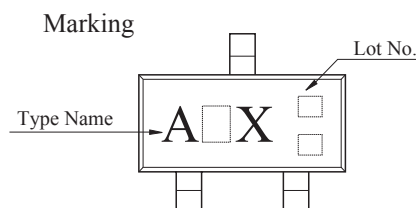
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage		$V_{(BR)CES}$	$I_C = -0.1mA, I_B = 0$	-30	-	-	V
Collector Cut-off Current		I_{CBO}	$V_{CB} = -30V, I_E = 0$	-	-	-0.1	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB} = -10V, I_C = 0$	-	-	-0.1	μA
DC Current Gain	MMBTA63	$h_{FE(1)}$	$I_C = -10mA, V_{CE} = -5V$	5,000	-	-	
	MMBTA64			10,000	-	-	
	MMBTA63	$h_{FE(2)}$	$I_C = -100mA, V_{CE} = -5V$	10,000	-	-	
	MMBTA64			20,000	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C = -100mA, I_B = -0.1mA$	-	-	-1.5	V
Base Emitter Voltage		V_{BE}	$I_C = -100mA, V_{CE} = -5V$	-	-	-2.0	V
Current Gain Bandwith Product		f_T	$I_C = -10mA, f = 100MHz, V_{CE} = -5V$	125	-	-	MHz

*Pulse Test : Pulse Width ≤ 300μS, Duty Cycle ≤ 2.0%

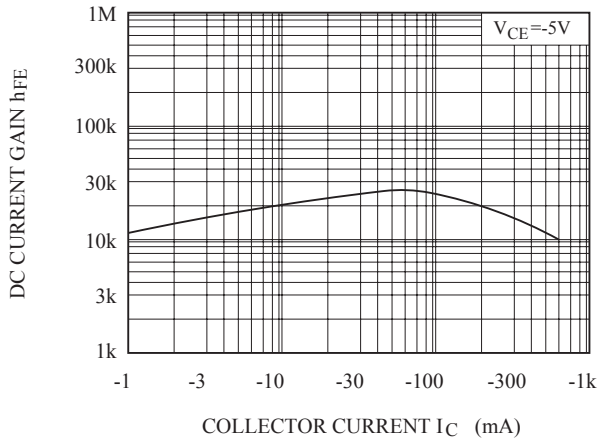
MARK SPEC

TYPE	MMBTA63	MMBTA64
MARK	AGX	AFX

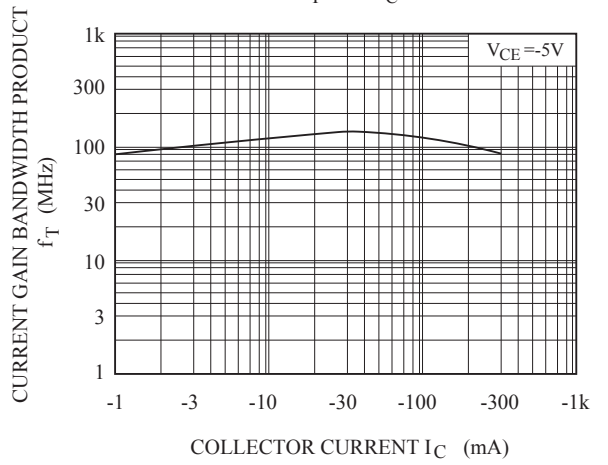


MMBTA63/64

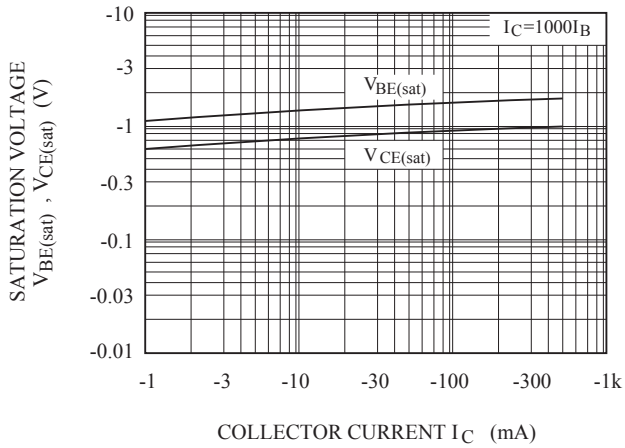
$h_{FE} - I_C$



$f_T - I_C$



$V_{BE(sat)}, V_{CE(sat)} - I_C$



$I_C - V_{BE}$

